Message

From: Lindstrom, Andrew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=04BF7CF26AA44CE29763FBC1C1B2338E-LINDSTROM, ANDREW]

Sent: 1/11/2018 1:09:26 PM

To: Newton, Seth [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ea2ecc1d228a4c4682730a829e1d0718-Newton, Set]; McCord, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=McCord, James]

CC: Mark Strynar [Strynar.Mark@epa.gov]; Bergman, Erica [Erica.Bergman@dep.nj.gov]; Goodrow, Sandra

[Sandra.Goodrow@dep.nj.gov]

Subject: FW: Solvay - Isomer Chemistry Questions

Attachments: Integral_2017-Perfluoroalkyl Compound Investigation Report_06-30-2017 - Narrative only.pdf; SURFLON analysis

table.pdf; FIGS 11a -11b GW PFAS data 2016 - TABLE 5 - Isomers in GW samples.pdf; Benskin rapid HPLC for PFAS

2012.pdf

Seth and James,

Here's a little background on the New Jersey samples that you should probably know about.

One of the things that we're trying to do in this study is to find out if PFNA (C9) contamination in this part of NJ could be coming from airborne sources. Historically, lots of C9 went into the Delaware River, and since it's tidal in this section, it washed back and forth, penetrating deep into some of the estuaries. So NJDEP has been looking mostly in these tidal contact areas for contamination so far.

But they think it is possible that airborne releases may have also contributed to the accumulation of PFNA in area. So we're looking at ponds and soils that are isolated from tidal influences to help check this out.

Anyway, the company says their PFNA was strictly straight chain (telomer derived) material, so if anyone finds any PFNA with isomeric peaks, that's not theirs. I don't understand the reasoning behind this argument and it sounds more like a legal tactic that will be used to create confusion and diffuse potential liability.

In any case, please be aware that NJ DEP will be asking for data on the presence of PFNA isomers in all of these samples. I don't know if the current method teases these peaks apart, but you should probably try to check this out. Please see the Benskin et al. 2012 paper attached above for some relevant discussion.

Thank you very much,

Andy

From: Bergman, Erica [mailto:Erica.Bergman@dep.nj.gov]

Sent: Wednesday, December 6, 2017 3:27 PM

To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Washington, John

<Washington.John@epa.gov>

Subject: Solvay - Isomer Chemistry Questions

Mark, Andy and John,

Here is the first of two emails regarding questions on Solvay's PFNA isomer chemistry interpretations.

Solvay contracted Vista Analytical Laboratory to analyze the SURFLON products that they purchased and used in 1991 and 1998-1999 (See Tabulated SURFLON analysis attachment). Solvay's predecessor's used SURFLON from 1985-1991, which is not accounted for in the analysis.

Solvay's PFAS Investigation Report (attached) contains two sections that discuss their findings regarding analysis of groundwater for branched and linear chain PFNA and PFOA. They conclude that since SURFLON contains 100% linear isomer PFNA, any branched chain PFNA found in groundwater would be from another source.

Section 3.8 – Source Differentiation (pages 3-10 and 3-11) Section 5.2.1 – Isomer Analysis (pages 5-4 through 5-7)

Can Solvay be certain in their above conclusion? Is this statement true but not entirely accurate (pg. 3-10) - "Once formed, the isomers themselves are stable so that a linear isomer does not degrade into a branched isomer, and vice versa"? For instance, is it possible that linear chain PFNA isomers could change to a branched structure by some other process other than degradation, i.e., geochemical conditions in the environment or during Solvay processing steps?

Let me know of others that may be able to assist, and feel free to forward.

Thank you,

Erica Bergman

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